

WHAT IS CLAIMED IS:

1. A method for preparing a substrate for hybridization, the method comprising:

positioning a porous layer on the substrate; and

collapsing a moat in the porous layer without substantially contacting the porous layer,

wherein the moat is adapted to bound a portion of the porous layer on which an array can be positioned.

2. The method of claim 1, wherein the collapsing occurs by the application of heat.

3. The method of claim 1, wherein the porous layer comprises nylon.

4. A method for manufacturing, comprising:

providing a substrate comprising a porous layer, wherein the porous layer is adapted for depositing an array;

providing a pattern dimensioned for a moat, wherein the moat is adapted to bound the array; and

collapsing the moat in the porous layer without substantially contacting the porous layer.

5. The method of claim 4, wherein the pattern is heated.

6. A method for preparing a hybridization chamber, comprising:

providing a substrate comprising a porous layer with a moat collapsed without substantial contact to the porous layer;

positioning an array on a portion of the porous layer bound by the moat; and

positioning a gasket in the moat to provide a nonporous seal.

7. An apparatus for preparing a hybridization substrate, comprising:
a press comprising a die adapted to collapse a moat in the porous layer;
a mechanical stop to provide a gap between the die and the porous layer; and
a holder comprising a thermal path adapted to collapse the moat in the porous layer,

wherein the gap is adapted to collapse the moat in the porous layer without substantially contacting the porous layer.

8. The device of claim 7, wherein the thermal path includes a non-conductive portion.

9. The device of claim 7, further comprising a pivotable base.

10. The device of claim 7, wherein the die comprises the shape of a substantially rectangular form.

11. The device of claim 7, wherein the die comprises the shape of a substantially elliptical form.

12. A press, comprising:
a die adapted to collapse a moat in a porous layer of a hybridization substrate;
a mechanical stop to provide a gap between the die and the substrate;
a holder comprising a thermal path adapted to collapse the moat in the porous layer,

wherein the gap is adapted to collapse the moat in the porous layer without substantially contacting the porous layer.

13. The press of claim 12, wherein the mechanism to provide a gap includes at least one stop-limit pin.

14. A substrate for hybridization, comprising:

a porous layer, wherein the porous layer is adapted for depositing an array;
and

a moat in the porous layer, wherein the moat is collapsed without substantial contact to the porous layer.

15. The substrate of claim 14, further comprising an array.

16. The substrate of claim 15, further comprising a hybridization fluid.

17. An apparatus for preparing a substrate for hybridization comprising means for providing a nonporous moat in a porous layer on a substrate, wherein the porous layer is adapted for depositing an array.

18. The apparatus of claim 17, further comprising means for spotting the array on the substrate.

19. A system for automated preparation of substrates for hybridization comprising:

a first linear actuator to position a press, wherein the press comprises a die with a pattern and mechanical stop, wherein the die is mounted on a second linear actuator; and

a third linear actuator to position a slide holder.

20. The system of claim 19, further comprising a fourth linear actuator to position a spotting head.

21. The system of claim 19, further comprising a camera to inspect a moat on the substrate.